

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
10 July 2003 (10.07.2003)

PCT

(10) International Publication Number
WO 03/056326 A1

(51) International Patent Classification⁷: **G01N 33/18**

(21) International Application Number: **PCT/EP02/14829**

(22) International Filing Date:
20 December 2002 (20.12.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
02/00008 2 January 2002 (02.01.2002) FR

(71) Applicant (for FR only): **SERVICES PETROLIERS SCHLUMBERGER** [FR/FR]; 42, rue Saint Dominique, F-75007 Paris (FR).

(71) Applicant (for all designated States except BF, BJ, BR, CA, CF, CG, CI, CM, CN, CZ, FR, GA, GB, GN, GQ, GV, IN, JP, LT, MA, ML, MR, NE, NL, OM, SD, SN, TD, TG, TN,

TR, TT, US, VN): **SCHLUMBERGER TECHNOLOGY B.V.** [NL/NL]; Parkstraat 83-89, NL-2514 JG The Hague (NL).

(71) Applicant (for GB, JP, NL only): **SCHLUMBERGER HOLDINGS LIMITED** [—/—]; PO Box 71, Craigmuir Chambers, Road Town, Tortola (VG).

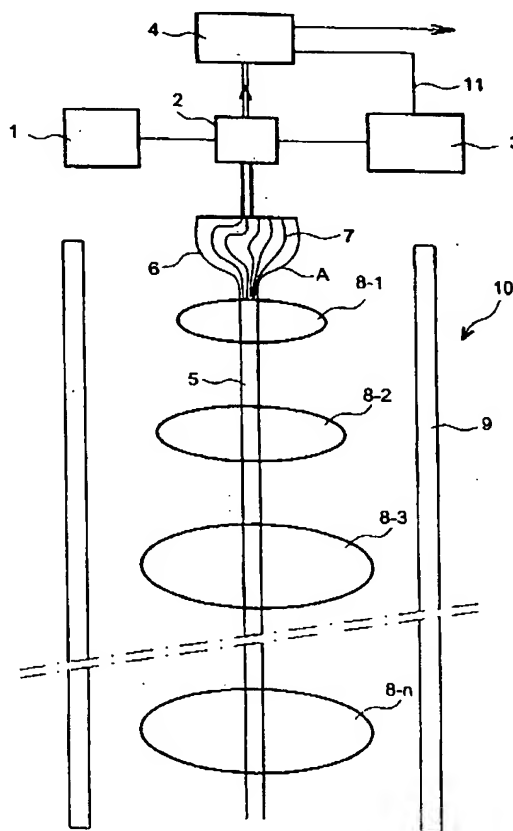
(71) Applicant (for CA only): **SCHLUMBERGER CANADA LIMITED** [CA/CA]; 24th Floor, Monenco Place, 801 6th Avenue SW, Calgary, Alberta T2P 3W2 (CA).

(71) Applicant (for BF, BJ, CF, CG, CI, CM, CZ, GA, GN, GQ, GV, IN, LT, MA, ML, MR, NE, SN, TD, TG, TN, VN only): **PETROLEUM RESEARCH & DEVELOPMENT N.V.** [NL/NL]; De Ruyterkade 62, Willemstad, Curacao (AN).

(71) Applicant (for CN only): **SCHLUMBERGER OVERSEAS S.A.** [PA/PA]; 8 Calle Aquilino de la Guardia, Panama City (PA).

[Continued on next page]

(54) Title: **SYSTEM FOR MONITORING SALINITY IN A WATER WELL**



(57) Abstract: A well (10) for producing water is characterized in that it includes a network of widely spaced electrodes (8) electrically coupled with measurement means (3) or with electric current generation means (1). By utilizing a measurement result, the progression of a salt water front heading for the well (10) may be detected.

WO 03/056326 A1